

Fig. 3.—A corner of the Human Pathology exhibit.

Coast. The American Medical Association is represented by an educational display, covering over a thousand square feet. Grouped around it, and extending throughout the entire length of the building, are to be found vivid portrayals of what the medical profession is doing in the care of the crippled child, the prevention of infectious disease, the lowering of maternal mortality. The plastic surgeon and the orthodontist show what they can do in the rebuilding of human deformity.

An exceptionally complete series of embryos and fetuses, beginning with a three-millimeter specimen, is attracting

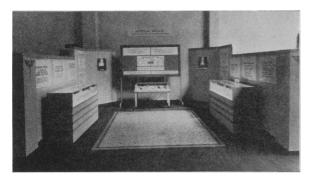


Fig. 4.—Alcove of the Maternal Welfare exhibit.

a great deal of attention. It is rivaled only by the group of one hundred pathologic specimens, well-lighted and clearly labeled. In connection with them, one sees what the bronchoscopist recovers from the lungs of the unfortunate, and how he does it.

Two other special features that are drawing a great deal of attention are the "surgeries" and the x-ray exhibit. Side by side are representations, life-size, of an operation as performed in 1882, and a modern "stream-lined" operating room with all its modern equipment. A 250 K. V. treatment machine, with a complete set of Coolidge tubes,



Fig. 5.—Exhibit of the Chicago Roentgen Society and the Pacific Roentgen Club.



Fig. 6.—Exhibit booth of the American Society for the Control of Cancer.

together with over five hundred transparencies (representing, all told, an investment of over \$80,000), completes the picture.

The Exposition management has given the committee an auditorium, in connection with the Hall, seating about five hundred. Moving pictures are being shown daily for the instruction of the public. A series of talks on medical topics is being prepared for the summer season, together with seminars on related subjects. Every opportunity is being utilized to present to the layman ethical scientific medicine and its achievements.

PHYSICIANS CORPS FORMED AS FORESTRY AID

Volunteer Doctors' Group Pledges Services in Emergencies

By CHARLES G. DUNWOODY

For many years the California State Chamber of Commerce, believing that California's forests and their protection represented an important economic problem in the future progress of the State, has endeavored through its leadership to interest the citizens of California in actively supporting the official agencies charged with forest protection to the extent that these forests may be wisely used and losses from fire, insects and disease be kept to a minimum.

As a result of this activity, literally thousands of people normally engaged in private occupations each year devote a considerable amount of time and travel at their own expense in the interest of forest protection.

The majority of these good citizens devote their energies toward the securing of adequate forest protection laws and regulations that will assure permanent and more satisfactory conditions within the boundaries of our great forests.

A few direct their energies toward physical forest protection work. The medical profession, not to be outdone by other groups, has recently entered the field of forest protection through the formation of the California Forestry Medical Corps.

This unique organization is the first of its kind to be organized in any country. It is sponsored by the California Medical Association and the California State Chamber of Commerce and at present has within its membership 485 outstanding physicians and surgeons.

It was formed for the purpose of providing organized and efficient medical service at all going forest fires. It functions when asked to do so by any representative of the State Division of Forestry, United States Forest Service, or a county fire warden. Its value has already been demonstrated during the past fire season.

On the recent Malibu fire in Southern California the corps performed its duties with precision and efficiency, and proved itself an indispensable adjunct in the case of a major forest conflagration.

Twenty-four-hour medical service was maintained on this fire, with eighty-two medical officers of the corps actively participating. Twenty-two hundred cases of injuries to fire fighters were successfully treated.

This service was rendered without cost to the individual treated or the governmental agencies in charge of the fire. Each doctor furnished his own transportation, medical equipment, and his time as his contribution to forest protection.

On another fire during the past season a medical officer of the corps was notified of an injury occurring on a mountain at around a 7000-foot elevation. He immediately borrowed a pair of heavy shoes, climbed the mountain and found a man with a broken spine.

Carrying the patient down the mountainside, the doctor placed him in a corps ambulance and sent him to the hospital, after giving him such treatment as was possible in the field.

The corps serves as a unit of the Conservation Department of the State Chamber of Commerce. It is headed by E. W. Murphy of Los Angeles, chairman of the statewide Conservation Committee.

Under Mr. Murphy's direction are a chief medical officer, an executive officer, six regional medical officers, fifty-eight county medical officers, and three hundred and ninety local medical officers and thirty liaison officers.

In addition to the above the corps has sixty-five registered nurses and thirteen ambulance units in its service.

Each medical officer is assigned to a specific district and signs an agreement to the effect that upon request of a forest officer he will proceed to the scene of a fire and give first-aid treatment to injured fire fighters, remaining on the job until properly relieved.

A dispatching system has been set up whereby in case of a major conflagration doctors are sent to all five camps and relieved when necessary.

A complete staff of liaison officers is maintained and during a major conflagration they patrol the region, making sure that the doctors are supplied with proper medicines and other necessary equipment. They also keep the county medical officer or his dispatcher informed of activities and needs in the field, arranging for relief doctors, etc.

The corps has one rescue unit of non-medical men who are trained in fire rescue work. The ambulance units are furnished to the corps for the most part by county hospitals equipped for this work.

The American Red Cross has fully cooperated with the corps, and where both organizations have been on duty at a fire has given splendid cooperation, working shoulder to shoulder with the medical officers.

During the winter months of low fire hazard, the medical officers conduct schools of first aid for forest officers. They also advise the forest officers as to the proper standardized equipment to be kept in their regular first-aid kits.

The corps is also available for duty in connection with any major public disaster, such as serious earthquakes.

The corps, in addition to being of great value on forest fire duty, has perhaps one of the greatest possibilities possessed by any individual group for educating the public concerning forest problems.

It would be difficult to estimate the number of people that would be reached through one forest fact imparted to a patient by a doctor, but if it went no further than the patient himself, the value of the corps in helping make the public more forest protection minded would be tremendous

Membership in the corps has been limited to five hundred. To qualify for membership a doctor must be passed upon and receive the approval of the California Medical Association. This procedure assures the corps of a personnel composed of only doctors of high standing in the profession. Already other western forested states are planning to organize similar groups.

California can well be proud of this unique and original contribution to forest protection that is being given without thought of personal gain by the members of the medical profession.

MORTALITY FROM CERTAIN DISEASES AMONG CHILDREN UNDER FIFTEEN YEARS OF AGE IN CALIFORNIA 1906-1934*

By Walter M. Dickie, M.D. San Francisco

PART I

During the time that the California State Department of Public Health has been keeping statistics on deaths from the various communicable diseases, there have been reductions in rates among most of them.

As these communicable diseases affect children under the age of fifteen to a large extent, a special study of these reductions has been made by the Division of Vital Statistics, with interesting results. For these studies the period from birth to fifteen years of age has been divided into three groups: (1) under one year of age; (2) from one to four years of age; and (3) from five to fourteen years of age. The rates are based on the estimates of population for each age group, and the rates are computed per 100,000 population in each age group. The twenty-nine-year period studied has been divided into one four-year and five five-year periods for ease in computation. These periods are 1906-1909 (four years), 1910-1914, 1915-1919, 1920-1924, 1925-1929, and 1930-1934. A comparison of the rates in each five-year-period is given for each disease studied.

TYPHOID FEVER

Age group under 1. In the period 1906-1909 this group shows ten deaths, with a death rate of 6.8 per 100,000 estimated population. This rises to 7.4 in the five-year period 1910-1914, and then steadily declines until in 1930-1934 there is a death rate of 1.2 per 100,000 estimated population of this age group.

In age group 1-4, the death rate initially is much higher than in the age group under one year. This decreased in each subsequent five-year period, the greatest decrease coming between the second and third periods, until in 1930-1934 the death rate for this group is 0.9 deaths per 100,000 population of the age group. The actual number of deaths in this group falls from 102 during the first four years of the study to sixteen during the last five years.

years of the study to sixteen during the last five years. The progress in the age group 5-14 years has been similar to that in age group 1-4, but not nearly so marked. Beginning with 246 deaths during the first four years, the number of deaths for the last five years of the study is reduced to eighty-five, with a corresponding reduction in death rates for the group from 18.6 per 100,000 population to 1.8 deaths from typhoid per 100,000 population.

Details of these changes are shown in the accompanying table.

Deaths from Typhoid Fever by Age Groups, California, 1906-1934

	←Under 1 yr.→		—1-4 years—		_5-14 years_	
$\mathbf{Y}\mathbf{ears}$	Number	Rate	Number		Number	
	10	6.8	102	18.1	246	18.6
	16	7.4	117	13.8	246	12.3
1915-1919	8	3.1	44	4.3	139	5.7
1920-1924	9	3.0	54	4.4	129	4.1
1925-1929	5	1.4	17	1.1	80	2.0
1930-1934	5	1.2	0.6	0.9	85	1.8

$\mathbf{MALARIA}$

The occurrence of deaths from malaria, as from typhoid fever, has been greatly reduced in this State in all the age groups studied. Especially is this so in the age group under one, where it is reduced from a rate of 19.7 per 100,000 estimated children under one in the quadrennium 1906-1909 to 0.8 per 100,000 in the years 1930-1934. Numbers have been reduced from twenty-nine in the earlier period to three during the last five years studied.

A similar picture is presented by ages 1-4, where the rate has been reduced from 3.9 in the earlier years to zero in the last five years. Numbers fall from twenty-two in 1906-1909 to zero in 1930-1934.

The reduction in age group 5-14 has not been so marked; beginning with a total of twenty-one cases and a rate of 1.6 per 100,000 population of this age group in

^{*} From the office of the Director, California State Department of Public Health.